

Impatiens talakmauensis (Balsaminaceae), a New Species from Western Sumatra, Indonesia

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Impatiens talakmauensis Utami (Balsaminaceae), a new species from Pasaman (Mt. Talakmau) western Sumatra, Indonesia, is newly described. It is characterized by yellow flowers, united lateral petals, reddish purple flushed veins of the lateral petals and the lower sepal. The lower sepal deeply navicular and abruptly constricted into a curved, short, pale yellow spur. The species was found in limestone areas of Mt. Talakmau, western Sumatra.

Key words: Balsaminaceae, *Impatiens*, Indonesia, New species, Sumatra, Taxonomy

Impatiens L. (Balsaminaceae) is a genus of about 850 species widely distributed throughout the Northern Hemisphere. The genus is represented on almost all major Malesian islands, such as Sumatra, Java, Borneo, the Philippines and New Guinea. Sumatra is one of the evolutionary hotspots in species diversity for the genus in Southeast Asia. About 38 species of *Impatiens* are now known from the island (Grey-Wilson 1989; Shizumi & Utami 1997; Utami 2005, 2009, 2011, in press). The characteristic of all the species are yellowish orange or yellow flowers and a well developed inflorescence. During our field work on Mt. Talakmau, western Sumatra, Indonesia, in 2011, a number of collections of *Impatiens* were gathered. Among them was a new species described here.

***Impatiens talakmauensis* Utami, sp. nov.**—Figs. 1–3.

Impatiens beccarii Hook.f. ex Dunn similis, sed labelli venis interne rubello-purpureis, calcare curvato, abbreviato, 1–1.5 cm longo, distinguenda.

Typus. Indonesia, Sumatra, Mt. Talakmau, 590 m alt., 00°07'05.2" N, 99°56'21.2" E, 16 June 2011, Marlina Ar-

diyani 458 (holo- BO).

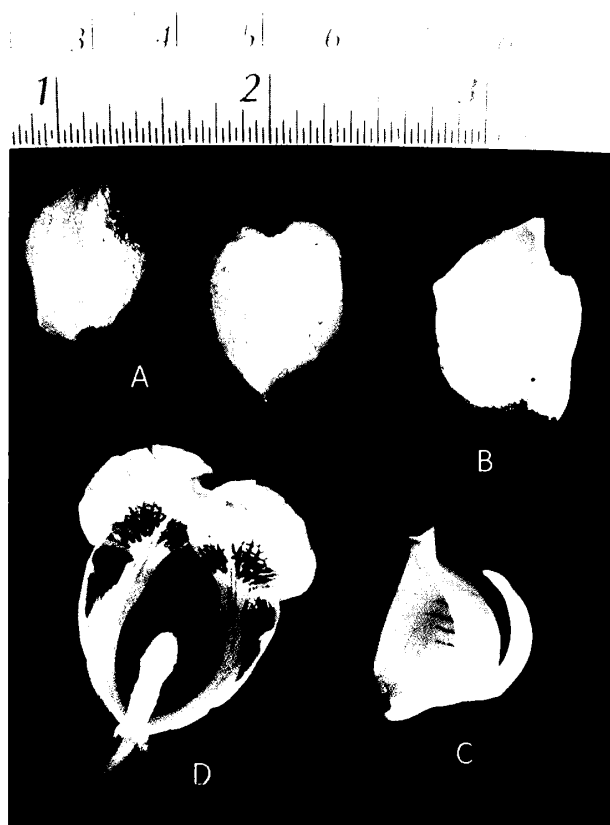
Herbs, perennial. Stems glabrous, 30–60 cm tall. Leaves alternate; petiole 2–4 cm; stipules axillary, 1 mm long; lamina ovate-lanceolate, 7–20 × 4–5 cm, base acute, margin serrate, apex acuminate, lateral veins 12–18 pairs. Inflorescences axillary, 2–4-flowered. Peduncle slender, 4–7 cm long, glabrous. Bracts linear, 1–1.2 cm long. Pedicels 2–3 cm long. Sepals lateral ones 2, ovate, 1–2 × 1–1.5 cm, yellow with green apex; lower sepal deeply boat shaped, 1.5–3 × 1–1.5 cm, with red veins inside, abruptly constricted into a curved spur; spur 1–1.5 cm long. Petals dorsal one yellow, hooded, 1.5–2.5 × 1–2 cm when flattened, with a shallow dorsal crest; lateral petals united; upper ones of each pair ovate, 1–2 × 1–1.5 cm; yellow, veins flushed reddish purple; lower petals of each pair lanceolate, 1.2–2 × 0.4–0.7 cm, yellow with reddish purple blotch. Ovary glabrous. Fruit capsules, fusiform, 1.5–2 × 0.6–0.8 cm in diameter, glabrous.

Phenology. Flowering and fruiting in June.

Distribution. Known only from the type locality.



FIG. 1. Habit of *Impatiens talakmauensis* Utami sp. nov.

FIG. 2. Flower of *I. talakmauensis*.FIG. 3. Floral organ of *I. talakmauensis*. Clock wise. A: Two lateral sepals. B: Dorsal petal. C: Lower sepal and spur. D: Two lateral united petals. (Photo by: Heru Handika, 2011).

Habitat. In limestone areas.

Conservation status. *Impatiens talakmauensis* is endemic to limestone area. Its limited distribution is threatened because the forest where it occurs is being converted to a plantation. Although *Impatiens talakmauensis* deserves conservation status, it can be treated only in the category Data Deficient (DD) (IUCN 2001).

Etymology. The species epithet *talakmauensis* refers to the mountain in the Pasaman regency/district of western Sumatra, Indonesia, where the species was collected.

Notes. *Impatiens talakmauensis* is closely related to *I. beccarii* Hook.f. ex Dunn. *Impatiens beccarii* has yellow flowers with red markings on the upper petal and the lower sepal is abruptly constricted into a filiform spur 0.7–2.5 cm long. The morphology of these two species leaves no doubt that they are distinct from each other.

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